In the Claims:

1. (currently amended) A method for enabling a traffic flow control down to all sub-ports of a switching function made of a N-port core switch fabric, said switching function comprising one or more port adapters, each said port adapter including one or more sub-port adapters, said method comprising the steps of:

in each said sub-port adapter,[[:]]
detecting congestion in an OUT leg of said sub-port adapter;
reporting said detected congestion through an IN leg of said sub-port adapter, said step of reporting further including the step of:
piggyback conveying said detected congestion over an incoming traffic entering an input port of said N-port core switching fabric from said IN leg of said sub-port adapter;
in said N-port core switch fabric:
broadcasting said detected congestion to all output ports;
in each said port adapter,
broadcasting said detected congestion to all sub-ports, thereby informing all said sub-port adapters of [[a]] said detected congestion in any one of said OUT leg.

2. (original) The method of claim 1 further comprising the steps of:
in each said sub-port adapter, checking whether said OUT leg of a Nth sub-port adapter is reported to be congested or not;

if congested, stop forwarding traffic destined for said OUT leg of said Nth sub-port adapter, said stopping step further comprising the step of:
holding traffic in said sub-port adapter if any is received;
if not congested, continue or resume forwarding traffic, if any received, destined for said OUT leg of said sub-port adapter;
continuing to cycle through each reported said sub-port adapter repeating all here above described steps.

3. (original) The method of claim 1 wherein said N-port core switch fabric is switching fixed-size packets.

4. (original) The method of claim 3 wherein said fixed-size packets, moved through the ports of said N-port core switch fabric, include fixed-size idle packets.

5. (currently amended) The method of claim 3 wherein more than a single ~~said~~ fixed-size packet are moved simultaneously through each port of said N-port core switch fabric.

6. (original) The method of claim 3 wherein the step of piggyback conveying said detected congestion is performed in a header field of said fixed-size packets.

7. (currently amended) The method of claim 4 wherein the step of piggyback conveying said detected congestion over said incoming traffic is carried out including a ~~said~~ fixed-size idle packet.

8. (original) The method of claim 6 wherein the step of reporting said detected congestion of all said sub-port adapters is time multiplexed in said header field.

9. (original) The method of claim 1 wherein the reporting step includes reporting per priority class.

10. (currently amended) A switching system expanding the number of ports of a switch fabric comprising[[;]]

a N-port core switch fabric,

one or more port adapters, each said port adapter including one or more sub-port adapters,

in each said sub-port adapter,[[;]]

means for detecting congestion in an OUT leg of said sub-port adapter;

means for reporting said detected congestion through an IN leg of said sub-port adapter, said reporting means further comprising:

means for piggyback conveying said detected congestion over an incoming traffic entering an input port of said N-port core switching fabric from said IN leg of said sub-port adapter;

in said N-port core switch fabric:

means for broadcasting said detected congestion to all output ports;

in each said port adapter,

means for broadcasting said detected congestion to all sub-ports, thereby informing all said sub-port adapters of [[a]] said detected congestion in any one of said OUT leg.

11. (original) The switching system of claim 10 further comprising :
in each said sub-port adapter, means for checking whether said OUT leg of a Nth sub-port adapter is reported to be congested or not;
if congested, means to stop forwarding traffic destined for said OUT leg of said Nth sub-port adapter, said stopping means further comprising,
means for holding traffic in said sub-port adapter if any is received;
if not congested, means to continue or resume forwarding traffic, if any received, destined for said OUT leg of said sub-port adapter;
means for continuing to cycle through each reported said sub-port adapter repeating all here above described steps.

12. (original) The switching system of claim 10 wherein said N-port core switch fabric is switching fixed-size packets.

13. (original)The switching system of claim 12 wherein said fixed-size packets, moved through the ports of said N-port core switch fabric, include fixed-size idle packets.

14. (currently amended) The switching system of claim 12 wherein more than a single ~~said~~ fixed-size packet are moved simultaneously through each port of said N-port core switch fabric.

15. (original) The switching system of claim 12 wherein said means for piggyback conveying said detected congestion is performed in a header field of said fixed-size packets.

16. (currently amended) The switching system of claim 13 wherein said means for piggyback conveying said detected congestion over said incoming traffic is carried out including said fixed-size idle packets.

17. (original)The switching system of claim 15 wherein said means for reporting said detected congestion of all said sub-port adapters is time multiplexed in said header field.

18. (original) The switching system of claim 10 wherein said reporting means includes reporting per priority class.

19. (currently amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for enabling a traffic flow control down to all sub-ports of a switching function

made of a N-port core switch fabric, said switching function comprising one or more port adapters, each said port adapter including one or more sub-port adapters, said method steps comprising:
in each ~~said~~ sub-port adapter,[[;]]
detecting congestion in an OUT leg of said sub-port adapter;

reporting said detected congestion through an IN leg of said sub-port adapter, said step of reporting further including the step of:

piggyback conveying said detected congestion over an incoming traffic entering an input port of said N-port core switching fabric from said IN leg of said sub-port adapter;

in said N-port core switch fabric:

broadcasting said detected congestion to all output ports;

in each said port adapter,

broadcasting said detected congestion to all sub-ports, thereby informing all said sub-port adapters of [[a]] said detected congestion in any one of said OUT leg.

20. (original) The program storage device of claim 19 further comprising the steps of:

in each said sub-port adapter, checking whether said OUT leg of a Nth sub-port adapter is reported to be congested or not;

if congested, stop forwarding traffic destined for said OUT leg of said Nth sub-port adapter, said stopping step further comprising the step of:

holding traffic in said sub-port adapter if any is received;

if not congested, continue or resume forwarding traffic, if any received, destined for said OUT leg of said sub-port adapter;

continuing to cycle through each reported said sub-port adapter repeating all here above described steps.

21. (original) The program storage device of claim 19 wherein said N-port core switch fabric is switching fixed-size packets.

22. (original) The program storage device of claim 21 wherein said fixed-size packets, moved through the ports of said N-port core switch fabric, include fixed-size idle packets.

23. (currently amended) The program storage device of claim 21 wherein more than a single ~~said~~ fixed-size packet are moved simultaneously through each port of said N-port core switch fabric.

24. (original)The program storage device of claim 21 wherein the step of piggyback conveying said detected congestion is performed in a header field of said fixed-size packets.

25. (currently amended) The program storage device of claim 22 wherein the step of piggyback conveying said detected congestion over said incoming traffic is carried out including said fixed-size idle packets.

26. (original) The program storage device of claim 24 wherein the step of reporting said detected congestion of all said sub-port adapters is time multiplexed in said header field.

27. (original) The program storage device of claim 19 wherein the reporting step includes reporting per priority class.